BY ORDER OF THE COMMANDER 30TH SPACE WING

30TH SPACE WING INSTRUCTION 63-102

16 JUNE 2011

Acquisition

30TH SPACE WING PRIME MISSION IPMENT (PME) REQUIREMENTS PROCESS

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This instruction implements AFSPCI63-104, Modifications to Systems and Implementation Approval Process, 2 January 2007. This instruction establishes a policy to control processes effecting Western Range (WR) Prime Mission Equipment (PME) Systems performance requirements. These requirements are derived from problems or limitations with PME, enhancement to PME due to changes in Range or Customer needs, and deficiencies against products during development. It applies to personnel and agencies of the 30th Space Wing (30 SW) involved in the acquisition, installation, integration, test and evaluation, logistics support, operation, and maintenance of new or modified systems on the WR. This publication incorporates the instructions previously published in 30 SWI 99-106, *Deficiency Validation Management*, and includes instructions that support objectives regarding Range Standardization with the 45th Space Wing (45 SW). Send proposed or recommended changes to this instruction to Requirements Flight 30th Range Management Squadron (30 RMS/RMR), 816 13th Street, Room 207, Vandenberg AFB, CA 93437 on Air Force (AF) Form 847, Recommendation for Change of Publication. Maintain and dispose of records created as a result of the processes described in this instruction in accordance with Air Force Manual (AFMAN) 37-123, *Management of Records,* and AFRIMS Records Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rims.cfm.** The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

1. Objectives.

1.1. The principle objective is to provide a uniform process to identify, approve/validate, control, prioritize, and status Prime Mission Equipment (PME) requirements derived from problems or limitations with PME, enhancement to PME due to changes in Range or Customer needs, and deficiencies against products during development. An additional objective is to define the major processes used to identify requirements and report deficiencies.

1.1.1. The Requirements Statement (RS) is the form for documenting requirements derived from problems or limitations with PME or enhancements to PME due to changes in Range or Customer needs. The RS is also a method for correction of deficiencies against PME.

1.1.2. The Deficiency Report (DR) is the method for documenting deficiencies against products under development.

1.1.3. An additional objective is to establish the repository for RSs, DRs, and the processes by which they are developed, maintained, and managed. The Visual Record Viewer, also known as VisualRV, is a web-based Business Process Management Application that contains all active and archived RSs and DRs, as well as the processes by which they are developed, maintained, and managed. This application also implements processes required by the Headquarters (HQ) Air Force Space Command (AFSPC).

2. Applicability.

2.1. This instruction applies to PME and establishes a policy for a uniform process to identify, approve/validate, control, prioritize, and provide status of PME requirements and deficiencies.

2.2. This instruction applies to personnel and agencies of the Wing involved in the acquisition, installation, integration, test, evaluation, logistics support, operation, and maintenance of new or modified systems on the Western Range (WR).

2.3. This instruction excludes:

2.3.1. Any modifications to administrative communication requirements.

2.3.2. Any modifications to the WR infrastructure not directly in support of PME submitted to Base Civil Engineering.

2.3.3. Any modifications to the maintenance of a facility not directly in support of PME.

3. Organizational Responsibilities.

3.1. 30th Operations Group Commander (30 OG/CC).

3.1.1. The 30 OG/CC is the final authority for the 30 SW validation of PME deficiencies, requirements, and all processes involved in their development, management and reporting.

3.1.2. The 30 OG/CC is the final 30 SW authority for delegation of PME deficiency and requirement validation. PME deficiency validation shall be delegated to the Wing Deficiency Validator. PME requirements shall be delegated to the Wing Requirements Validator.

3.1.3. The 30 OG/CC is the final authority in the establishment of those systems considered as PME, and the Major Segments, and definition of the Major Segments, which comprise the PME.

3.1.4. The following shall detail responsibilities of delegated units for the PME Requirements and Deficiency Reporting Process:

3.1.4.1. When so delegated, the responsible squadron is the Wing's OPR for establishing and maintaining PME requirement and deficiency identification processes through the Wing Requirements Coordinator.

3.1.4.2. When so delegated, the Wing Requirement Statement (RS) validation authority is the Wing Requirements Validator. Validation shall be the action by which the Wing establishes a requirement as an officially documented need of the Range PME. Validation is an official action of the Wing.

3.1.4.3. When so delegated, the Wing Requirements Validator will serve as the Chair of the Wing's Review Board (RVB)--where approval decisions are documented, requirements are coordinated and prioritized, and all Wing comments are addressed. The Chair shall execute orders of the 30 OG/CC, in regard to any RS that has been reviewed by the 30 OG/CC (see paragraph **4.5.2**).

3.1.4.4. When so delegated, Wing Requirements Validator establishes the score of all Wing RSs prior to submitting to HQ AFSPC RVB or Space and Missile Systems Center (SMC). The scoring of any Wing RSs is a responsibility of the Wing Requirements Validator.

3.1.4.5. When so delegated, Wing Requirements Validator represents the Wing at all HQ AFSPC RVBs relating to PME. This is the responsibility of the Wing Requirements Coordinator, in coordination with the Wing Requirements Validator.

3.1.4.6. When so delegated, Wing Requirements Validator is the responsible organization to insure that all Wing DRs are properly categorized, prioritized, correct, accurate and if acceptable are submitted to SMC for processing. This duty may be further delegated to a Deficiency Manager.

3.1.4.7. When so delegated, Wing Requirements Validator represents the Wing at the Deficiency Review Board (DRB) for new or modified PME. This duty may be further delegated to a Deficiency Manager.

3.1.5. Responsible Squadrons shall provide a Point of Contact as the customer for all RSs affecting their PME.

3.2. 30th Range Management Squadron (30 RMS):

3.2.1. Serves as RVB member to ensure the Wing's priorities are addressed.

3.2.2. As of publication of this Instruction, the 30th Range Management Squadron (30 RMS) is OPR for the PME and is also delegated authority to maintain both Wing Requirements Validator and Wing Requirements Coordinator, both assigned to 30 RMS Range Systems Flight. The 30 RMS is also delegated authority to define equipment and resources as PME, and to further define the list and demarcation points for all major segments of the PME.

3.2.2.1. The Squadron shall designate their specific assignment of this responsibility by letter to the 30 OG/CC; this letter shall include the organizational position where that assignment is located.

3.2.2.2. The responsibilities of the Wing Requirements Validator and the Wing Requirements Coordinator may be performed by direct report to the 30 OG. The Wing Requirements Validator and the Wing Requirements Coordinator shall be authorized to perform any and all actions, to include such things as bypass of Requirements Validation Board (RVB) member comments on RSs under electronic review, insertion of any comment on behalf of any person otherwise authorized to do so, and any other override of process in support of good and timely RS generation, review, modification, approval, cancellation, closure, and validation.

3.2.2.3. In order to accomplish this delegation, the 30 OG shall sign a letter that shall be maintained by the 30 OG, with a copy to be kept by the Squadron. Delegations made by any 30 OG command authority (Commander, Deputy Commander, or Technical Director) shall be considered in force until changed by a new letter.

3.2.2.4. The Wing Engineer shall be that individual responsible for the technical performance of specified PME and is assigned through chain of command by the Responsible Squadron which is OPR for the major PME Segment within which the asset lies. The Wing Engineer shall be an employee of the Government and may not be a contractor. For all PME within their assigned systems, the Wing Engineer is authorized to determine the existence and nature of any deficiencies, approve any statement of deficiency and/or requirement, make initial assessment of impact, likelihood, and/or operational cost savings, and continue or cancel any existing statement of deficiency or requirement. Approval shall be considered an action of official recommendation to the OG and/or agencies designated by the OG to act on behalf of the OG.

3.3. 30th Space Communications Squadron (30 SCS):

3.3.1. Serves as RVB member to ensure that PME requirements affecting base administrative communications systems and capabilities are fully evaluated for impacts and those requirements that need 30 SCS support or using/interfacing with systems and equipment for which 30 SCS is responsible have been identified and addressed.

3.3.2. Serves as RVB member to ensure Information Assurance (IA) requirements are addressed. The 30 SW IA office is located in the Information Systems Flight of the 30 SCS (30 SCS/SCXI). The RVB member who represents the Wing IA Office may be a separate person than the RVB member representing the NETSEG (see paragraph **3.3.1**).

3.4. 30th Space Wing Plans and Programs (30 SW/XP):

3.4.1. Serves as RVB member to ensure that future Range Customer program requirements are addressed.

3.4.2. Is the OPR for Program Introductions and Statements of Capability documents to identify PME capabilities and shortfalls that impact customer programs.

3.5. 30th Space Wing Safety (30 SW/SE):

3.5.1. Serves as RVB member to ensure Range Safety requirements are addressed.

3.5.2. Identifies PME systems and subsystems as Range Safety Critical.

3.5.3. Identifies requirements that impact the conduct of Safety Critical operations.

3.6. 2d Range Operations Squadron (2 ROPS):

3.6.1. Serves as RVB member to ensure that Universal Documentation System (UDS) and operator requirements are addressed.

3.6.2. Serves as OPR for the UDS process and UDS documentation management except for Program Introductions and Statements of Capability.

3.6.3. Provides Range Customer interfaces for PME needs.

3.6.4. Assists Range Customers external to the Wing by initiating or completing RSs for modifications of PME that support customer requirements.

3.6.5. Serves as RVB member to ensure that current Range Customer program requirements are addressed.

3.7. 30th Weather Squadron (30 WS):

3.7.1. Serves as RVB member to ensure Meteorological requirements are addressed.

3.8. 30th Range Management Squadron (30 RMS/RMO):

3.8.1. Serves as RVB member to ensure that potential sustainment issues are addressed.

3.9. Space and Missile Systems Center Range Systems Program Office, Vandenberg Operating Location (SMC/LRRV):

3.9.1. Serves as RVB advisor to address any procurement and depot-level maintenance issues with submitted RSs.

4. Requirements Process.

4.1. The 30 SW Requirements Process shall be defined and implemented using an electronic tool known as the Visual Record Viewer or VisualRV. RSs approved by 30 OG/CC and HQ AFSPC are defined as 'Validated'. Validated RSs are sent to SMC, who develops and implements the modification or new system.

4.2. The final and definitive process is defined in Visual Record Viewer (VRV) and may be viewed at any time by any person authorized access to VisualRV, **www.imis.rc.patrick.af.mil**. This process may be adjusted as needed in order to optimize the process. The 30 SW is custodian of sub-process 3 of the RS review/validation/implementation process and is authorized by HQ AFSPC to adjust this process as desired by the Wing. The Wing Requirements Coordinator is authorized to make any and all changes in the VRV process not otherwise directed in the HQ RVB Management Guide.

4.3. Any Federal Government Employee (i.e., Originator) involved with the Range can draft and submit a RS using VRV, accessed via the following link: **https://imis.rc.patrick.af.mil/vrvhome**/ and clicking on the "add new" button under "RS-1320 Requirement Statement" heading. The RS is electronically forwarded for Wing initial consideration. Only Employees of the Federal Government may draft, author, or submit any

RS into the system; under no circumstance shall any RS be drafted, authored, or submitted by a contractor or contractor employee.

4.4. Wing Assessments.

4.4.1. A technical assessment is conducted and SMC/LRRV provides initial score recommendations. Definitions of the scoring criteria are contained in the VisualRV. The technical assessment insures completeness and correctness and may be accomplished by contractor evaluations currently authorized to serve the WR.

4.4.2. The assigned Wing Engineer (see paragraph **3.1.4.3**) will then perform an integrated assessment by reviewing and resolving all technical comments received against the RS. Changes may be made to the RS during this process.

4.4.3. The assigned Wing Engineer makes a recommendation and provides an initial score input to the Wing RVB.

4.4.4. Wing RVB members review the RS content, technical assessments, and initial score and provide approval or disapproval, and score recommendations to the RVB Chair who shall make the final decision regarding validation and score, in accordance with the orders from the OG. This is accomplished using VRV.

4.5. Wing Validation.

4.5.1. 30 OG review shall be conducted by the 30 OG (Commander, Deputy Commander or Technical Director, see paragraph **3.1**). Review of RSs for 30 OG is during the Requirements Operation Group Executive Review (ROGER). 30 OG review shall afford the opportunity for all 30 OG Responsible Squadrons, Wing Safety, Wing Plans and Programs, Wing Information Assurance, and any other agency directed or requested by the 30 OG to raise issues specific to any RS being reviewed, discuss these issues and be offered a reasonable opportunity to form a consensus regarding any RS under review. While the 30 OG may exercise unilateral authority to approve any RS, regardless of objection, it shall be within the authority of the 30 OG/CC to obtain consensus on any given RS. The Wing Requirements Coordinator may propose a review of requirements that are ready for validation; this proposal may be made directly to the 30 OG, with advice to all OG Responsible Squadrons. A ROGER may be required on a periodic or emergency basis.

4.5.2. Wing RVB Chair (as delegated by the 30 OG/CC) will act upon the RS as ordered by the OG. Validated RSs follow the steps below for either local validation or submission to HQ RVB. Chair will update the RS content and score, as applicable.

4.5.2.1. A local validation is done when there is no requirement for HQ AFSPC validation. Local validations are made only if the modification meets all the following criteria: (a) no impact to form, fit, or function; (b) Government estimate is less than $500K and (c) has no Performance Specification level impact.

4.5.2.2. A locally validated RS will not be scored by HQ (potentially lowering the possible score by 25 points).

4.5.2.3. RSs that do not meet the local validation requirements are sent to HQ AFSPC for validation.

4.6. HQ AFSPC validates RSs and add their own scores as needed, IAW HQ RVB Management Guide, or returns RS to the Wing Requirements Validator for update or cancellation. If the RS is validated then it will be included in the next HQ AFSPC approved IPL update.

4.7. Implementation

4.7.1. SMC/LRRV and/or SMC/LRL determines the solution, creates an Engineering Change Proposal (ECP) if needed, obtains Configuration Control Board (CCB) approval of the ECP and implements the solution approved in the ECP. SMC/LRRV may also include their own scoring to add to the scoring made by the Wing and HQ.

4.8. After SMC delivers a tested, documented, and logistically supportable solution, SMC/LRRV and/or SMC/LRL recommends closure via the Readiness Review Board (RRB) and sends the RS to the Wing for closure. The Wing will perform any additional operational tests and evaluation and request the customer review the solution for buy off. Closure is decided by the Wing and generally requires complete satisfaction of all elements requested in a RS.

4.9. The following organizations shall be authorized to designate members to the RVB:

4.9.1. Each Responsible Squadron; 2 ROPS, 30 RMS, 30 SCS, and 30 WS.

4.9.2. Wing Plans and Programs Office (30 SW/XP).

4.9.3. Wing Safety Office (30 SW/SE).

4.9.4. Wing Information Assurance Office (30 SCS/SCBI).

4.9.5. SMC/LRRV may designate members to the RVB who are assigned to the local Operating Location or Detachment.

5. Wing Deficiency Reporting Process.

5.1. This section defines the 30 SW implementation of the deficiency reporting process identified in Technical Order (T.O.) 00-35D-54, USAF Deficiency Reporting (DR) and Investigating System**,** 1 Jul 04. General terms and responsibilities for the DR process are defined in this T.O.

5.2. Preprocessing: Only the Wing Engineer shall be authorized to draft and submit a DR using the VisualRV, accessed via the following link: **https://imis.rc.patrick.af.mil/vrvhome**/ and clicking on the "add new" button under "Deficiency Report" heading. DR is electronically forwarded to the 30 RMS Quality Flight (RMQ) Deficiency Management Office (DMO). The Wing Engineer can be notified via email that a discrepancy has been found.

5.3. Government Assessment.

5.3.1. 30 RMS Originating Point, 30 RMS Screening Point, and SMC Action Point are assigned by the 30 RMS/RMQ DMO based upon the project. Additionally, the DMO coordinates with the Originator to insure completeness and accuracy of DR and electronically forwards to the assigned 30 RMS Originating Point.

5.3.2. The assigned 30 RMS Originating Point reviews the DR for completeness and impact at the project level then recommends one of the following: (a) approve without

comment, (b) approve with comment, (c) hold as watch item, (d) cancel or (e) submit as a RS. Electronically forwards to the 30 RMS Screening Point.

5.3.3. The assigned 30 RMS Screening Point reviews the DR for completeness and impact at the Wing level then does one of the following: (a) recommends validation as Category I or Category II and electronically forwards to the Deficiency Review Board (DRB), (b) categorizes the issue as a Watch Item Rand places on Hold for Government review at a later date or (c) cancels the DR.

5.4. DRB with representatives from SMC, 30 RMS, and (as applicable) 17th Test Squadron (17 TS) reviews the DR for completeness and impact and either rejects the DR or approves the DR. If the DR is approved a category is assigned, a priority is established and is electronically forwarded to SMC for implementation.

5.5. SMC implements the DR and electronically notifies the DRB that work has been completed.

5.6. DRB reviews and coordinates with 30 RMS/RMQ DMO, 30 RMS Originating point, and 30 RMS Screening point to determine whether DR has been satisfied. If the determination is positive, the DR is closed. Otherwise it is returned to SMC for additional work.

RICHARD W. BOLTZ, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES, AND SUPPORTING INFORMATION

References

AFSPCI63-104, *Modifications to Systems and Implementation Approval Process* 2 Jan 2007

TO 00-35D-54, *Technical Manual USAF Deficiency Reporting and Investigating System*, 01 July 2004

Adopted Forms

AF Form 847, *Recommendation for Change of Publications,* 22 September 2009

Abbreviations and Acronyms

2 ROPS—2d Range Operations Squadron

30 OG—30th Operations Group

30 RMS—30th Range Management Squadron

30 SCS—30th Space Communication Squadron

30 SW—30th Space Wing

30 WS—30th Weather Squadron

45 OG—45th Operations Group

45 SW—45th Space Wing

DMO—Deficiency Management Office

DR—Deficiency Report

DRB—Deficiency Review Board

ER—Eastern Range

HQ AFSPC—Headquarters Air Force Space Command

IA—Information Assurance

IPL—Integrated Priority List

IRES—Integrated Requirement Entry System

LTRS—Launch and Test Range System

O&M—Operations and Maintenance

OPR—Office of Primary Responsibility

POC—Point of Contact

PME—Prime Mission Equipment

PRD—Program Requirements Document

PSM—Program Support Manager

PSP—Program Support Plan

PWRR—Project, Workflow, Requirement, and Resources

ROGER—Requirements' OG Executive Review

RS—Requirements Statement

RVB—Requirements Validation Board

SMC—Space and Missile Systems Center

SPO—System Program Office

SWI—Space Wing Instruction

UDS—Universal Documentation System

Terms

Eastern Range (ER)—The designated area of responsibility for the AFSPC managed LTRS activity for tracking and command/control of missiles, launch vehicles, and specific spacecraft from the Eastern United States.

Integrated Priority List (IPL)—A record containing all validated RS's. The list is published every six months by HQ AFSPC and is given to SMC to assist in determining execution order. The IPL is reviewed semi-annually by all parties. All the contents of the IPL are reviewed according to subsystem such as weather, radar, or telemetry.

Prime Mission Equipment (PME)—Range instrumentation systems are the combination of software, firmware, and hardware required to perform the WR mission. This includes, but is not limited to, radar, telemetry, optics, Global Positioning System (GPS), weather, data processing, telecommunications, command and control, display, closed circuit television, monitoring and surveillance, and simulation in implementation with automated information systems to acquire, display, an analyze data collected as an instrumentation network in support of ballistic missiles, space shuttle and other launch systems, aircraft fly-bys, and orbital satellites.

Requirements Statement (RS)—The paper, or electronic equivalent, that communicates the requirement to modify the PME. After validation by 30 SW, and HQ AFSPC where required, the requirement is tasked to the System Program Office (SPO), or the authorized implementers to modify the PME.

RS Scores—Determine the priority rankings of the RS's in the IPL. Scores are determined by answers to a unique set of scoring questions. The answers are assigned a value, which is placed into an equation to compute the score. VRV contains scoring detail needed to score RSs.

Validated—Means that a requirement has been accepted as an official statement by the 30 SW.